

SUSTAINABILITY BY DESIGN: INDUSTRIAL DESIGN



Industrial design was born to support mass production. While the rational approach of reducing manufacturing costs and time was the starting point, soon the qualities achieved by embedding identity through the choice of shape, surfaces and colours were added.

Excellence in creating beautiful and intuitive products has always been at the core of Danish industrial design, and companies in the industry have for decades used industrial design to emphasize intended use and enhance the user experience. Whether it is lifestyle products like Bang & Olufsen's, medico equipment from Brüel & Kjær or light switches from Lauritz Knudsen, a design-driven approach has been a driving force in innovation.

Human behaviour

Being able to put oneself in another person's place is a core competence in design. Both when it comes to improving the operation of appliances and when forecasting the next big thing, insight in human behaviour is essential. And just as collaboration with engineers to choose better materials and manufacturing processes is a premise, so is the collaboration with anthropologists to ensure that the solutions designed meet the demands of people intended to use them.

Danish designers have a long tradition of working with users to create innovative and relevant solutions. In recent years – through international inspiration and collaboration – this approach has developed into the more radical way of designing *with* people instead of *for* people – called co-creation.

...and services and strategy

While industrial design originally focused on shaping things, the methods behind them are increasingly being used in other areas. Today, designers find themselves working not only on products but also on the strategy behind them and the services around them.

Fundamentally there are no products without services and no services without products, and companies are finding new ways of doing sustainable business by combining the two into shared systems where customers do not necessarily buy their products but are given access to them through sharing, pooling, subscribing, etc. Thus, Danish designers of today are embracing the whole chain of products, services and strategy – from production to consumption – reducing the need for stuff while improving quality of life.

CASE

GRUNDFOS

Grundfos: Sustainability and design as strategy

Grundfos is the world's largest manufacturer of circulation pumps. ALPHA2 is their most innovative pump designed with customer needs and sustainability as the starting point. ALPHA2 has increased its market shares beyond expectations and is one of the products intended to consolidate Grundfos' position in the market.

In Grundfos, design and sustainability are anchored throughout the organization from management to production. Integrated in the company's vision, mission and objective, design and sustainability are parts of the overall strategy for Grundfos. Grundfos' primary reasons for focusing on design and sustainability are to strengthen the company's position in a competitive market by the added value from the products' embedded social responsibility.

By the use of design and high technology in all innovation processes, Grundfos focuses on sustainability throughout the product's life cycle. This calls for a long list of prerequisites that must be met during the design process, production and transportation. When the product reaches the end of its life, Grundfos offers to help customers dispose of it, hence making sustainability run like a continuous thread through the entire life cycle of the product.

Grundfos has defined a 'Design-DNA' that must be visible in all their products. "You must recognize immediately that you stand before a Grundfos pump" says Henrik Kjeldgaard, business development manager in Grundfos. The continued development of the design-DNA is

carried out with the users and their needs as a starting point. In this way, the products' usability is improved along with both the internal and external perception of Grundfos' many product categories.

ALPHA2 is one of Grundfos' newest products and one of their most innovative and popular products to date. The design process was initiated by the identification of an unmet user need. It took 18 months from the birth of the idea to the finished product. In that period of time 25 employees in diverse areas like technology, design and marketing were involved in the project. It was Grundfos' internal design department of six industrial designers that carried out the design part of the project.

Together with Grundfos' additional portfolio of new products, ALPHA2 makes visible the company's values in sustainability and social responsibility.

"We are highly focused on keeping a lead compared to our competitors in the market. This is the only way we can continue to be the best-selling company in our business and thereby make the largest revenue. We do that by being a front-runner in innovation, technology and design and by continuously incorporating sustainability in all our design processes," says Carsten Bjerg, CEO and group president.

Further information
Grundfos: www.grundfos.com



Grundfos has integrated design and sustainability into the core of their ALPHA2 circulation pump. Photo: Danish Design Center/ Grundfos